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Californians' Opinions on The Management of Wildland and Wilderness Fires



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Executive Summary

This technical report contains the findings from a collaborative research effort between the Pacific Southwest Research Station (Dr. Patricia L. Winter) and San Diego State University (Douglas Coe and Cathleen Happersett). A random sample of residential telephone numbers in the eight major regional divisions of California was drawn, and numbers were called on weekends and weekdays during fall, 2001. The final cooperation rate was 83.9 percent. Data were entered in the computer-assisted telephone interviewing (CATI) system and then transferred to SPSS. Data were then weighted to match the regional population sizes. Reporting is of the weighted data.

The report is divided into sections as follows: the introduction, description of the survey instrument, methodology, and the findings on wildland and wilderness fire management. Appendices are included which present the zip codes of respondents and open-ended responses.

The main findings include:

- Respondents were concerned about wildland and wilderness fires in California, though they tended to see others as less concerned.
- Ratings of knowledge were mostly in the middle range of the scale, indicating that respondents were somewhat cautious in assessments of their own knowledge about wildland and wilderness fires.
- Most respondents perceived shared values similarity with the Forest Service regarding fire management on forestlands. Overall trust in the agency to manage fires was also high.
- The majority felt that “We probably have to let some fires burn, but must protect residences”; though almost one-third agreed, “All fires must be extinguished regardless of cost.”
- Signs and area closures were the most approved of management interventions; area closures and controlled burns were expected to be the most effective.
- The lowest approval and effectiveness ratings were given to banning specific uses on the forest.
- Respondents were unsure about the role of fire in the survival of native plants, though many other factual statements found strong agreement. Differences in true/false responses were found linked to educational level.
- Some significant differences on the above items were found when contrasting the responses of those who had visited National Forests and those who had not.

Given these findings education appears to have an important role in the relationship between the Forest Service and the public concerning fire and fire management. High average concern and conservative ratings of knowledge, paired with perceived shared values and trust, offer an open door for communication and education.

Cover Photo: The cover photo was obtained at http://whyfiles.org/018forest_fire/cant_burn.html and was taken by Ric Balfour of the Oregon Department of Forestry.

Introduction

National Forest management in California involves a number of pressing issues, including wildland and wilderness fires and fire management. Public opinions regarding these issues are important to examine, as they are useful to natural resource managers in formulating decisions where public opinion can weigh into the decision process. Researchers and academicians are interested in these opinions because they are helpful in understanding how people will respond to various policy initiatives and management proposals. The attitudes, opinions, and beliefs of the public are the focus of this study, in large part because it is the public that the Forest Service serves.

This study is a follow-up to inquiries about land management preferences and the role of social trust in those preferences. Prior applications have included an examination of reactions to a proposed research program in an adaptive management area (Cvetkovich, Winter and Earle 1995), reactions to possible interventions to protect a watershed (Cvetkovich and Winter 1998), public reactions to a proposed recreational fee demonstration program in southern California (Winter, Palucki and Burkhardt 1999), and opinions about threatened and endangered species management on forestlands (Cvetkovich and Winter 2001, Cvetkovich and Winter in press, Winter and Knap 2001).

Method

Survey Instrument

The research team at San Diego State University developed a survey designed to be administered in conjunction with the computer-assisted telephone interviewing (CATI) system. All respondents were asked the same sociodemographic, and outdoor recreation and forest visitation/activity questions. Random assignment to either a fire survey or a threatened and endangered species survey determined which attitudinal items were asked.

Survey items focused on concern about wildland and wilderness fires, perceived concern of others, level of knowledge about fires, shared values similarity with the Forest Service and trust, agreement with general attitudinal statements about fire and fire management, and approval and perceived effectiveness of selected management strategies. Respondents were also asked to identify a series of statements about fire and fire management as true or false.

Procedure

A sample of residential telephone numbers was created, drawn from eight regional divisions in California. These regions included the Bay Area, Central Coast, Central Valley, Inland Empire, Los Angeles, North Coast/Sierra, Orange County, and San Diego County. The total population for each of these regions was determined, in relation to the state population, based on data from the State of California Department of Finance. These regional proportions were then used to create weights for the final data set.

Selection of which survey the respondent would complete (fire or threatened and endangered species) was made randomly, with a target of 600 of each completed form, after the following: reaching the adult in the household (18 and over) with the most recent birthday, willingness to participate in a phone survey, and then determining if the respondent was male or female (each final set of respondents was targeted to have half males and half females). The same series of screening questions and introductory statement were read. Responses were entered directly into the CATI system. At the completion of the survey respondents were thanked for their participation. The final cooperation rate was 83.9 percent. The survey took an average of 15 minutes to complete, although times ranged from 7 to 44 minutes.

Data were then transferred to SPSS and analyzed using a variety of summary and descriptive procedures as well as those designed for statistical comparisons. Findings to the fire survey are provided in this report. The report on threatened and endangered species is available upon request from the author.

Respondents

Respondents to the survey were randomly selected California residents contacted by telephone during fall, 2001 by the research team at San Diego State University. A total of 606 telephone surveys were completed by individuals who were 18 years of age or older.

By design, approximately equal numbers of males and females completed the survey (49.6 percent and 50.4 percent respectively). The vast majority (90.8 percent) of the surveys were completed in English. The majority of respondents had attended college, reflecting a well-educated set of respondents (*table 1*). Respondents represented higher education levels than California residents based on Census data (U.S. Census Bureau, Census 2000).

Table 1. Highest Level of Education Completed

Education Level	Percent
Middle school or less	7.6
A high school degree (or G.E.D.)	20.0
At least 1 year of college/trade/vocational school	33.2
Graduated college with Bachelor's degree	20.7
At least 1 year of graduate work beyond Bachelor's	18.4
Don't know/refused	.1

Ages of respondents varied, with almost two-thirds (64.3%) between 25 and 54 years (*table 2*). Minimum age for participation was 18. The vast majority had lived in the United States all of their lives (78.9 percent). Those who had not been in the United States all of their lives had lived here an average of 22.2 years (SD=15.3, n=125). Only one non-U.S. born respondent had a "don't know/refusal" on length of time in the country.

Table 2. Age Group of Respondents

Age Group	Percent
18 to 24	12.5
25 to 34	20.4
35 to 44	21.9
45 to 54	22.0
55 to 64	10.8
65 or over	12.1
Don't know/refused	.4

Annual household income varied with over half reporting \$35,000 or greater per year (*table 3*). Responses mirror percentage of California residents in various household income categories in the most recent census with less than 1.5% difference in any one category (U.S. Census Bureau, Census 2000). Broader categories for the higher income levels than for the lower categories should be noted. The refusal rate of 15 percent was expected, as individuals tend to be somewhat uncomfortable providing income information, even when categories are provided.

Table 3. Annual Household Income

Income	Percent
Under \$5,000	2.6
\$5,000 up to (but not including) \$10,000	4.4
\$10,000 up to (but not including) \$15,000	4.7
\$15,000 up to (but not including) \$25,000	9.8
\$25,000 up to (but not including) \$35,000	8.4
\$35,000 up to (but not including) \$50,000	13.2
\$50,000 up to (but not including) \$75,000	17.0
\$75,000 up to (but not including) \$100,000	10.7
\$100,000 or more	13.9
Don't know/refused	15.4

A majority of respondents were White/Caucasian (60.1%) or Hispanic/Latino (21.6%) (*table 4*). Respondents could select multiple categories, though they were asked to state the category that best described them. Slightly more respondents selected 'White' as a category than California residents in the 2000 census (U.S. Census Bureau, Census 2000).

Table 4. Ethnic/racial Categories of Respondents

Ethnicity/race	Percent
White or Caucasian	60.1
Hispanic or Latino/a	21.6
Asian or Pacific Islander	7.7
Black or African American	4.0
Native American or First Nations	2.9
Another ethnic/racial group, or selected multiple categories	3.1
Missing	2.7

Few respondents (10.4 percent) reported memberships in environmental organizations. However, when an environmental organization was named, the Sierra Club was most often mentioned (*table 5*). Organizations were sometimes mentioned that do not have environmental concerns within their primary missions; they were excluded from further analysis.

Table 5. Respondents' Memberships in Environmental Organizations

Environmental Organization ¹	Percent
Sierra Club	2.9
Greenpeace	1.6
World Wildlife Federation	1.6
Audubon Society	1.3
Nature Conservancy	1.3
Surfrider	.7
National Wildlife Federation	.6
Defenders of Wildlife	.3

¹Only organizations reported by more than 1 respondent are listed.

Respondents were asked about their visits to National Forests in California. Almost three-fourths (73.3 percent) had visited any of the National Forests. Among those, an average of 4.6 (SD=26.4, n=435) visits during the past 12 months was reported. The first visit to any National Forest in the state was an average of 24.5 years ago (SD=16.1, n=431).

Participation in outdoor recreation varied, though almost half (49.5 percent) reported engaging in activities several times a month or more frequently (*table 6*). This question included any type of outdoor recreation, engaged in on or off forestlands. Respondents reported less frequent participation than a national survey on outdoor recreation conducted for the Recreation Roundtable (Roper Starch 2000). In that study, two-thirds of respondents engaged in outdoor recreation several times a month or more often.

Table 6. Participation in Outdoor Recreation on an Annual Basis

Participation Level	Percent
Several times a week	27.7
Several times a month	21.8
About once a month	17.4
Once or twice a year	16.9
Rarely or never	16.0
Don't know/refused	.2

Among those who participated in outdoor recreation at least part of the year (508 respondents) a wide variety of activities was reported. The most frequently reported activities included hiking, walking, camping, and swimming (*table 7*). These activities were listed in response to an open-ended request for the top three outdoor recreational activities engaged in most often. Levels of participation across various activity categories are somewhat similar to the survey conducted for the Recreation Roundtable (Roper Starch 2000).

Table 7. Outdoor Recreational Activities

Activity	Number of Respondents	Percent of Those Participating in Outdoor Activities
Hiking	179	35.2
Walking	137	27.0
Camping	98	19.3
Swimming	69	13.6
Running	60	11.8
Freshwater fishing	58	11.4
Street biking	54	10.6
Mountain biking	37	7.3
Boating	33	6.5
Golf	29	5.7
Soccer	29	5.7
Basketball	29	5.7
Picnicking	28	5.5
Downhill skiing	26	5.1

Results

Concern and Knowledge about Wildland and Wilderness Fires in California

Respondents were asked to indicate, using a scale from 1 to 8 (1=not at all concerned, 8=very concerned), how concerned they were about wildland and wilderness fires in California. Most (69.9 percent) rated their concern above the neutral range (6, 7 or 8), with an overall mean of 6.3 (SD=2.0, n=598; *fig. 1*).

Respondents were also asked to indicate, using the same scale from 1 to 8, how concerned in general they thought California residents are about wildland and wilderness fires. Respondents tended to see others as less concerned than themselves (mean of 5.3, SD=1.8, $n=580$; *fig. 1*).

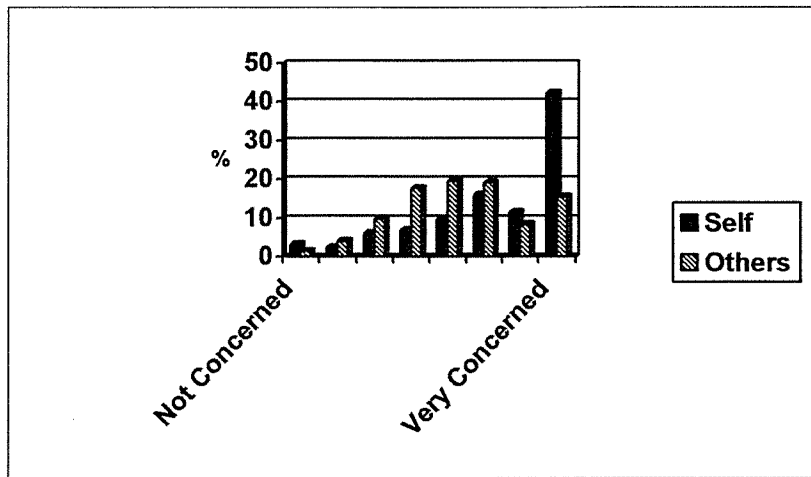


Figure 1. Self Concern and Concern of Others about Wildland and Wilderness Fires in California

Out of the 575 respondents who rated both their own concern and concern of others, 324 rated their own concern as greater, 146 rated their own concern as equal to that of others, and 105 rated others' concern as greater than their own. These differences were statistically significant ($z = -10.462$, $p < .001$). These findings might be expected given two things: respondents probably had, as a general rule, more concern about fires than others since they agreed to participate in the survey, and people tend to see themselves in a more positive light than they tend to see others (known as 'the self-serving bias').

Perceived degree of knowledge was also queried. Respondents were asked to rate their own knowledge about wildland and wilderness fires in the state on a scale from 1 to 8 (1=not at all knowledgeable, 8=very knowledgeable). Respondents were not particularly confident in their level of knowledge, with few rating themselves on a 6, 7 or 8 (38.3 percent). The average knowledge rating was 4.6 (SD=2.1, $n=597$; *fig. 2*).

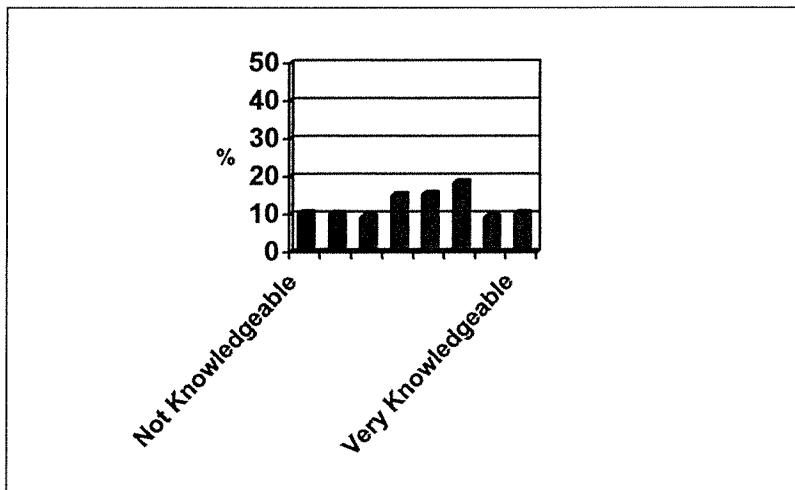


Figure 2. Perceived Knowledge about Wildland and Wilderness Fires in California

Respondents who had visited National Forest lands were more likely to rate their knowledge about wildland and wilderness fires as higher than those who had not (means of 4.9 versus 3.9, $F_{1, 585}=29.328$, $p < .001$).

Perceived Value Similarity and Trust

The Shared Values Similarity Model (Earle and Cvetkovich 1995) was adapted for this survey and explored the respondents' perceived similarity between themselves and the Forest Service based on values, goals, views, and thinking regarding how forest fires should be managed. The model suggests that the determination of trust depends in a large part upon perceptions of shared values (defined as values, goals, views, and thinking) regarding the topic of interest (*fig. 3*). That is, the more a respondent perceives his or her own values as similar to the Forest Service regarding how forest fires should be managed, the more he or she will trust the Forest Service. Trust in the Forest Service was also queried. Trust judgments and perceived shared values are important because they can reduce the complexity in interactions between the public and the Forest Service. Specifically, those who trust the Forest Service and see themselves as similar are more likely to accept agency actions and initiatives, even when they do not necessarily agree with the specific action.

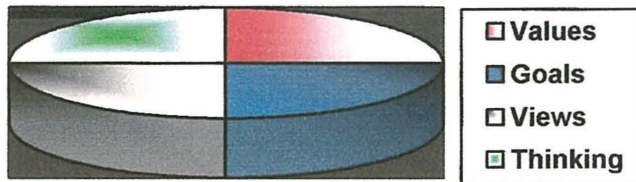


Figure 3. Model of Shared Values Similarity

While some have asserted that trust in government is low, findings to the contrary are readily available (Kasperson, Golding and Kasperson 1999). In fact, recent work suggests that a majority of individuals trust the Forest Service to make land management decisions (Borrie and others 2002, Cvetkovich and Winter 1998, Cvetkovich and Winter 2001, Winter, Palucki and Burkhardt 1999). The latest work suggests that among those who trust the Forest Service, there are some who believe that when/if the agency acts contrary to those shared values, the reasons for this apparent inconsistency are justified (Cvetkovich and Winter in press). There are others who feel that sometimes those inconsistencies are unjustified. They share values, but find unwarranted inconsistencies between those values and what the agency does; and they tend to trust the Forest Service less. Finally, there are those who distrust the agency and do not perceive any shared values with the agency. These are individuals who would be difficult to persuade regarding the merit or value of agency actions. They appear to be a small percentage of respondents whom we have contacted. That hypothesis is currently being tested in a follow-up study on-site with recreationists regarding threatened and endangered species, and in a statewide phone survey modeled after the one in this report, currently in progress in New Mexico, Arizona and Colorado. Unfortunately, extreme instances of distrust in the Forest Service decrease the likelihood of participation in agency sponsored or agency collected information efforts, making study of the opinions of this particular subset of the public more challenging.

Values

Respondents used a scale from 1 to 8 to rate the similarity of their values to those of the Forest Service (1=does not share your values, 8=shares your values). A majority (60.6 percent) indicated shared values (ratings of 6, 7 or 8) with the Forest Service on how forest fires should be managed (*fig. 4*). About one-tenth (12.6 percent) did not have an answer for this item. In general, people viewed their own values of how forest fires should be managed as similar to those of the Forest Service (mean=6.2, SD=1.9, n=529).

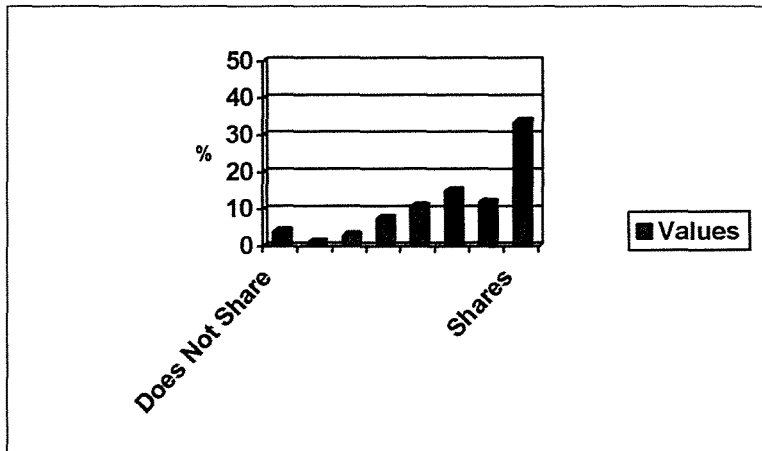


Figure 4. Shared Values on How Forest Fires Should be Managed

Goals

Shared goals were rated on a scale from 1 to 8, where 1 was equal to “the Forest Service has different goals”, and 8 was equal to “the Forest Service has the same goals.” The majority (59.0 percent) indicated shared goals for management of forest fires (ratings of 6, 7 or 8; *fig. 5*). Some (14.1 percent) did not respond to this item. On average, people viewed the goals of the Forest Service as similar to their own regarding fire management (mean of 6.0, SD=2.1, n=520).

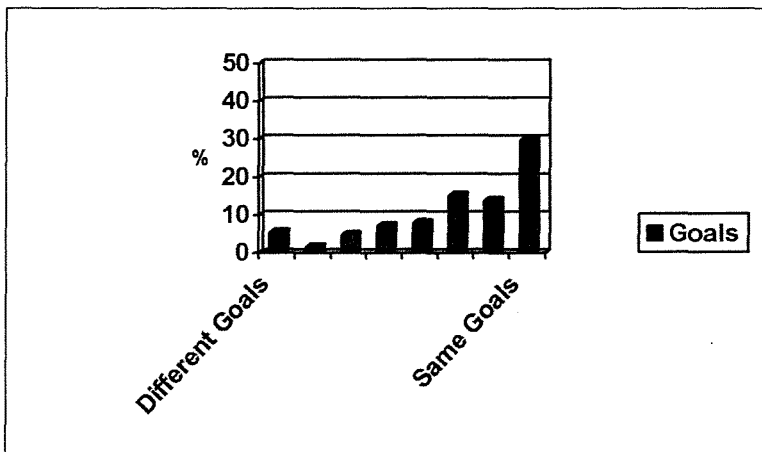


Figure 5. Shared Goals on How Forest Fires Should be Managed

Views

Similarity of views was explored. Respondents were asked to rate, on a scale from 1 to 8, to what extent the Forest Service supported their views about management of forest fires (1=the Forest Service opposes your views, 8=the Forest Service supports your views). A majority (60.4 percent) indicated the Forest Service supports their views about the management of forest fires (ratings of 6, 7 or 8; *fig. 6*). A few (15.8 percent) did not provide an answer on this item. On average, respondents felt the Forest Service supported their views regarding forest fire management (mean of 6.3, SD=1.9, n=510), although fewer respondents answered this item than the questions on values and goals. This was probably because it was the 3rd value question in the series of value items.

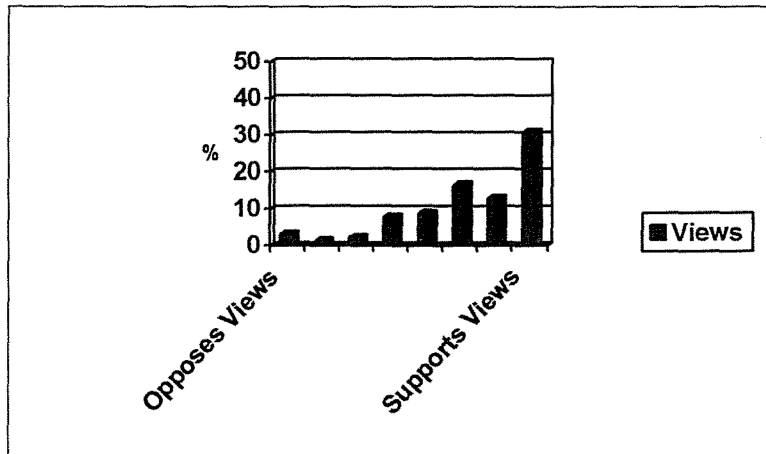


Figure 6. Shared Views about Management of Forest Fires

Thinking

Respondents used a scale from 1 to 8 to rate the similarity of their thinking to that of the Forest Service regarding the management of forest fires (1=the Forest Service thinks unlike you, 8=the Forest Service thinks like you). More than half (56.6 percent) selected ratings of 6, 7 or 8, indicating perceived similar thinking (*fig. 7*). Less than one-fifth (15.7 percent) did not have a response for this item. Among those who provided a response, people tended to see their own thinking about forest fire management as similar to the Forest Service (mean=6.0, SD=2.0, n=511).

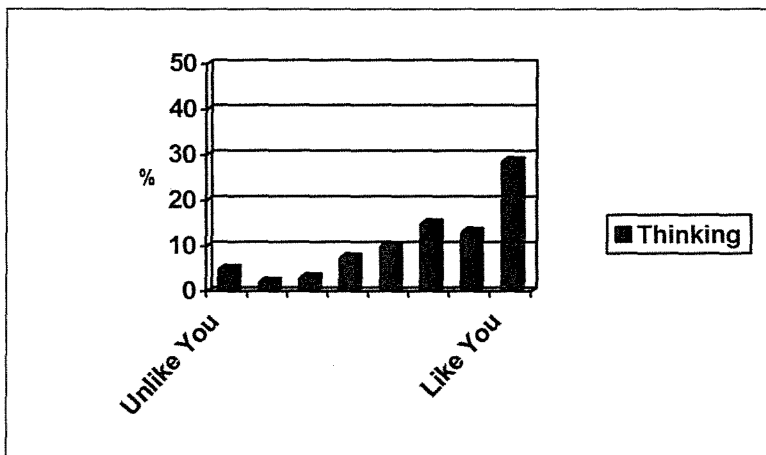


Figure 7. Similarity of Thinking Regarding Management of Forest Fires

Trust

Trust in the U.S. Forest Service in their efforts to manage forest fires was rated on a scale from 1 to 8 (1=you do not trust the Forest Service at all, 8=you trust the Forest Service completely). The majority (80.1 percent) indicated that they trusted the Forest Service regarding forest fire management (ratings of 6, 7 or 8, mean of 6.8, SD=1.7, n=583; *fig. 8*). Respondents who had visited National Forest lands were somewhat less likely to trust the Forest Service to manage fires than those who had not (means of 6.7 and 7.0, $F_{1,570}=4.298$, $p<.05$).

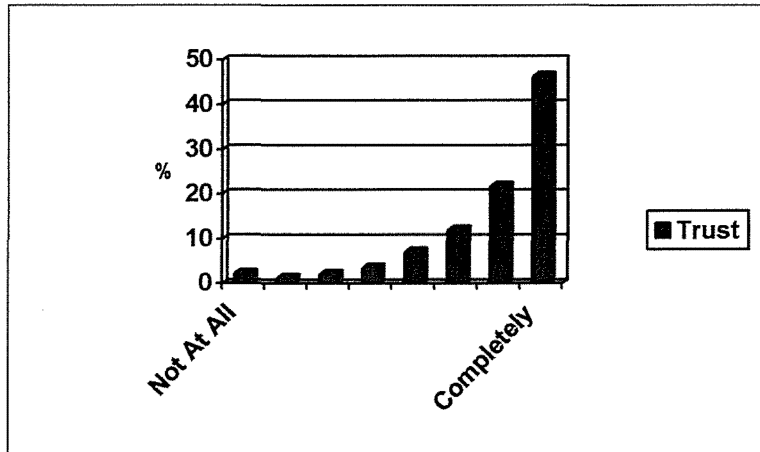


Figure 8. Trust in the Forest Service to Manage Wildland and Wilderness Fires

Relationship Between Value Items and Trust

The measures of shared values similarity (SVS) and trust were highly correlated with each other, in keeping with results of past studies (for example, Winter and Knap 2001; *table 8*).

Table 8. Pearson Correlations Between Perceived Similarity Items and Overall Trust

SVS/Trust Item	Trust	Thinking	Views	Goals
Values	.487*** ¹ (519)	.645*** (486)	.664*** (485)	.662*** (494)
Goals	.477*** (515)	.642*** (488)	.673*** (489)	
Views	.563*** (503)	.724*** (489)		
Thinking	.527*** (503)			

¹ ***= Significant at $p<.001$.

Opinions about Forest Fire Management

Beyond overall trust in the Forest Service and perceived shared values, there was an interest in a general, or global opinion about fire management. Respondents were asked to select which of three statements best represented their opinion about forest fire management. The greatest percentage (60.1 percent) were in agreement with the statement "We probably have to let some fires burn, but must protect residences." Almost one-third (31.5 percent) agreed with the statement "All fires must be extinguished regardless of cost." Very few (5.4 percent) agreed with the statement "Fires must be allowed to take their natural course when burning in wildland or wilderness areas, even if structures are involved." (3.0 percent of respondents did not select any of the aforementioned statements.)

Approval and Effectiveness of Management Strategies

Moving from general to specific, a series of management approaches for fire in wildland and wilderness areas was presented. For each approach, respondents were asked to rate, on a scale from 1 to 8 (1=strongly disapprove, 8=strongly approve) their degree of *approval* of the approach. They were also asked to rate, on a scale from 1 to 8 (1=not effective, 8=highly effective), how *effective* they thought each approach would be.

Controlled Burns

The first strategy was "If the Forest Service were to conduct controlled burns to reduce vegetation and decrease the likelihood of large, uncontrolled fires." Controlled burns received the 4th highest approval rating of the six management approaches (mean=6.2, SD=2.2, n=590). However, controlled burns had the 2nd highest effectiveness rating on average (mean=6.3, SD=1.9, n=585). The majority of ratings for both approval and effectiveness fell into the range of 6 through 8 on the scales (*fig. 9*). Less than 12 percent (11.9 percent) disapproved of controlled burns (ratings of 1, 2 or 3), or rated them as ineffective (8.5 percent, ratings of 1, 2 or 3).

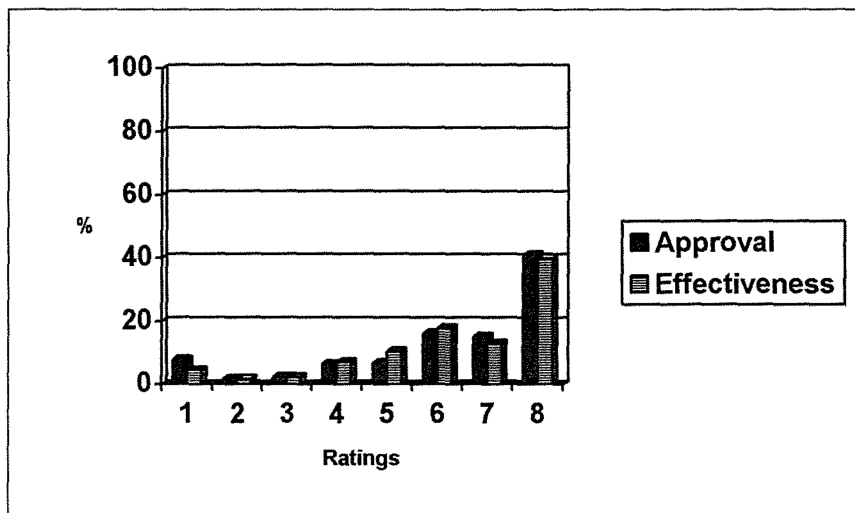


Figure 9. Approval and Effectiveness of Controlled Burns

Ban Mechanically Based Uses

Respondents were asked to rate the approval and effectiveness of the following: "If the Forest Service were to ban mechanically based uses on forest lands or areas of forests during fire season, such as off-road vehicle use or mountain biking." Bans were the least approved of management approach (mean=5.3, SD=2.6, n=576). Almost one-fourth indicated disapproval of bans (24.9 percent, ratings of 1 through 3; *fig. 10*). Bans were also expected to be the least effective approach (mean=5.3, SD=2.4, n=570), though almost half (49.8 percent) rated bans as effective (ratings of 6, 7 or 8).

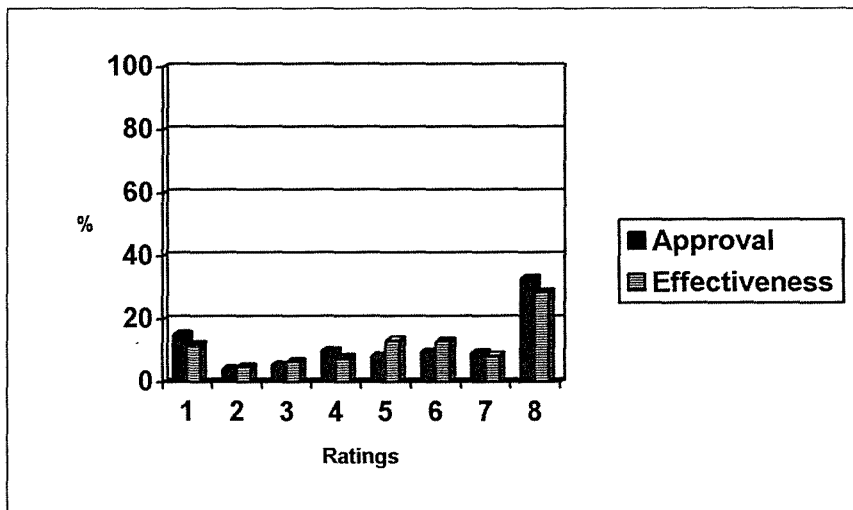


Figure 10. Approval and Effectiveness of Banning Mechanically Based Uses

Restrictions on Use

Another strategy queried was "If the Forest Service were to make certain restrictions on uses of wildland and wilderness areas, for example, allowing fires in agency-built fire rings only." Restrictions on use received the 3rd highest approval rating of the six management approaches (mean=6.3, SD=2.1, n=568). Similarly, it had the 4th highest effectiveness rating on average (mean=6.2, SD=2.1, n=561). The majority of ratings for both approval and effectiveness fell into the range of 6 through 8 on the scales (*fig. 11*). Less than 11 percent (10.8 percent) disapproved of restrictions (ratings of 1, 2 or 3), or rated them as ineffective (10.4 percent, ratings of 1 through 3).

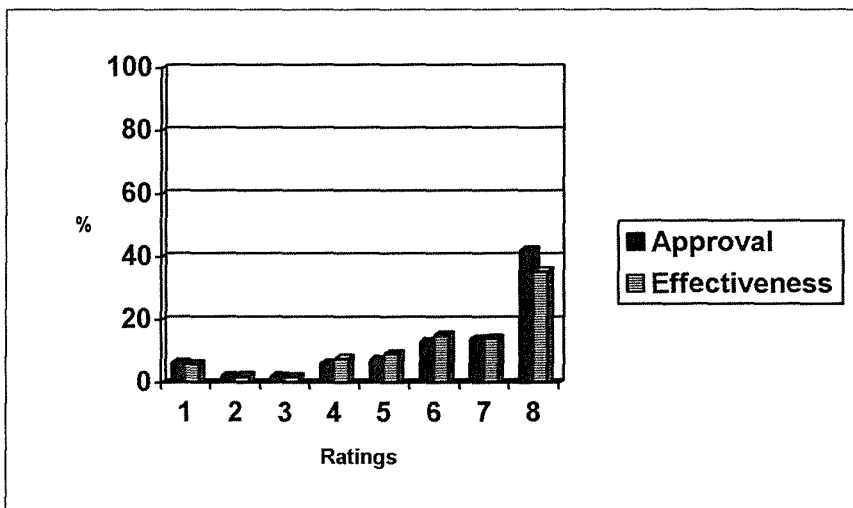


Figure 11. Approval and Effectiveness of Restrictions on Use

Signs at Recreation Sites

The fourth management approach was “If the Forest Service were to have signs at recreation sites informing forest users of fire risks and how they can help prevent fires.” Signs received the highest approval rating of the six management approaches (mean=7.4, SD=1.2, n=602). However, signs had the 3rd highest effectiveness rating on average (mean=6.3, SD=1.8, n=600). The vast majority of ratings for both approval and effectiveness fell into the range of 6 through 8 on the scales (*fig. 12*). Less than one-tenth (2 percent) disapproved of signs (ratings of 1, 2 or 3), or rated them as ineffective (8.0 percent, ratings of 1 through 3). Respondents who had visited National Forest lands tended to rate the effectiveness of signs lower than those who had not (means of 6.0 versus 6.5, $F_{1,587}=12.750$, $p<.05$, using adjusted Bonferroni alpha of .004).

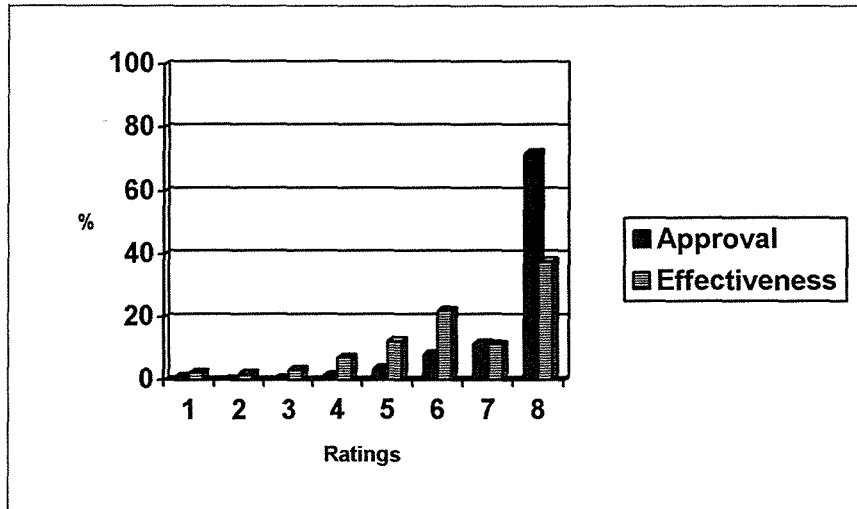


Figure 12. Approval and Effectiveness of Signs in Recreation Sites

Closure of Some Areas

Another management approach queried was “If the Forest Service were to close some areas during fire season, but keep the majority of the areas open to use.” Closure received the 2nd highest approval rating of the six management approaches (mean=6.6, SD=2.1, n=592). Similarly, closure had the highest effectiveness rating on average (mean=6.4, SD=2.0, n=586). The vast majority of ratings for both approval and effectiveness fell into the range of 6 through 8 on the scales (*fig. 13*). Less than 11 percent (10.8 percent) disapproved of closure (ratings of 1, 2 or 3), or rated it as ineffective (9.6 percent, ratings of 1 through 3).

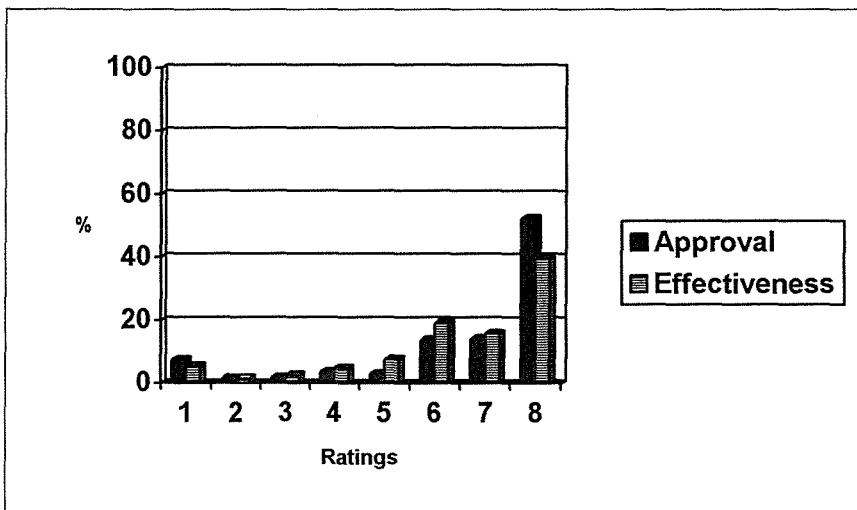


Figure 13. Approval and Effectiveness of Closure of Some Areas

Chipping or Other Mechanical Means

The sixth management approach queried was “If the Forest Service were to reduce fuels by chipping or other mechanical means.” Chipping or other mechanical means received the 5th highest approval rating of the six management approaches (mean=5.7, SD=2.4, n=532). Similarly, chipping or other mechanical means had the 5th highest effectiveness rating on average (mean=5.6, SD=2.3, n=505). A slight majority of ratings for both approval and effectiveness fell into the range of 6 through 8 on the scales (*fig. 14*). Approximately 15 percent (16 percent) disapproved of chipping or other mechanical means (ratings of 1, 2 or 3), or rated them as ineffective (15.1 percent, ratings of 1 through 3).

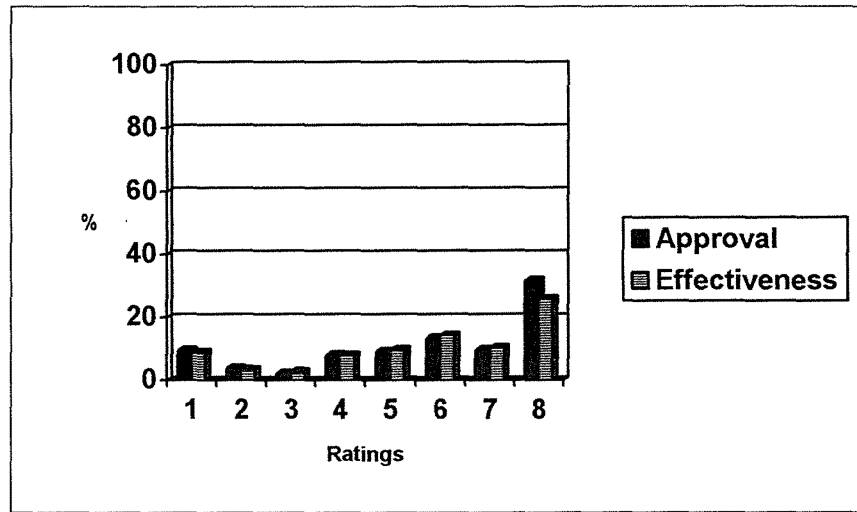


Figure 14. Approval and Effectiveness of Chipping or Other Mechanical Means

To review, ratings of approval and effectiveness of the six possible management interventions were gathered. Signs received the highest approval rating overall, but was ranked 3rd in expected effectiveness. Closure of some areas was expected to be the most effective. Banning mechanically based uses was the least approved of, and expected to be the least effective of the six interventions. Ratings of interventions are fairly similar to those reported by Winter and Knap (2001), based on a recreationist survey on National Forests in southern California.

Table 9. Summary of Rank Ordering of Management Interventions

Rank (1=highest approval/effectiveness)	Approval	Effectiveness
1	Signs at recreation sites	Closure of some areas
2	Closure of some areas	Controlled burns
3	Restrictions on use	Signs at recreation sites
4	Controlled burns	Restrictions on use
5	Chipping/mechanical means	Chipping/mechanical means
6	Ban mechanically based uses	Ban mechanically based uses

Selected Facts Regarding Wildland and Wilderness Fires

Several statements were presented regarding wildland or wilderness fires, and respondents were asked to rate each as true or false. A majority rated 9 out of the 10 statements as true (*table 10*).

Table 10. Percent Ratings of True or False on Statements Regarding Fire and Fire Management

Item	% True	% False	% Don't Know/Refused
Controlled burns reduce the risk of larger, uncontrolled fires.	90.5	6.4	3.1
Fire means danger to residences and other important structures.	89.5	8.9	1.6
There are proven management techniques for fire prevention and suppression.	82.8	6.9	10.2
People have difficulty breathing due to poor air quality after a fire.	82.8	13.6	3.6
Prescribed fires are used to accomplish certain land management objectives.	80.3	10.0	9.7
Views along the road and on trails are less scenic following a fire.	77.7	16.4	5.9
Fire is a natural ecosystem process.	77.4	16.9	5.8
The health of vegetation is improved following a controlled burn.	74.2	17.4	8.4
Fires lead to improved survival of native plants.	52.1	33.8	14.1
Controlled burns are likely to burn up more area than planned.	40.7	49.1	10.2

Respondents who were better educated were more likely to agree with the statements "The health of vegetation is improved following a controlled burn", "Fire is a natural ecosystem process", "Fires lead to improved survival of native plants", and "Prescribed fires are used to accomplish certain land management objectives." Each of these varied significantly by education level at $p < .05$ (using an adjusted Bonferroni alpha of .0036, with χ^2 tests).

Discussion and Conclusions

Respondents to this survey of opinions regarding wildland and wilderness fires and fire management in California were residents age 18 and older, contacted by telephone in the fall of 2001. The cooperation rate was high. The sample of respondents was random, and appears to be sociodemographically similar to data from the 2000 Census. The data were weighted for appropriate geographic distributions within the state. All of these attributes make the findings of great interest, since they can be taken as representative of the general sentiments of California residents regarding fire and fire management.

Most respondents were fairly concerned about fire, though they viewed others as less so. They were not particularly confident in their knowledge about fire. Most trusted the Forest Service in its efforts to manage fires, and perceived shared values between themselves and the agency regarding fire management. Signs and area closure were the most approved of interventions, though closure and controlled burns were expected to be the most effective. The least approved of, and least effective ratings were given to banning specific uses on forestlands. The reaction to bans was somewhat anticipated given recent inquiries into methods to address threatened and endangered species. Respondents appear to be somewhat unsure about the role of fire in survival of native plants, though other statements found solid patterns of agreement. Overall the general opinion of almost one-third that no cost should be spared in extinguishing fires is a point of concern.

It appears that education will play an important role in the relationship between the Forest Service and the public concerning fire and fire management. The findings of higher concern and lower knowledge, paired with a

trend towards trust and shared values, point to an open door for communication and education efforts with publics. The role of fire in survival of native plants can be one key message to offer. Another key area could be the determination of which fires are to be allowed to burn once ignited, how fires are managed or controlled, and when suppression becomes the main focus.

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Appendix A: Residential Zip Codes of Respondents Grouped by Region

Region	Zip	City	n
Bay Area	94002	Belmont	1
	94010	Burlingame	1
	94014	Daly City	2
	94015	"	2
	94018	El Granada	1
	94019	Half Moon Bay	1
	94020	La Honda	1
	94022	Los Altos	1
	94062	Redwood City	1
	94063	"	1
	94065	"	1
	94086	Sunnyvale	1
	94087	"	2
	94089	"	1
	94102	San Francisco	1
	94109	"	1
	94112	"	1
	94117	"	2
	94123	"	1
	94129	"	1
	94134	"	2
	94306	Palo Alto	1
	94402	San Mateo	1
	94501	Alameda	3
	94502	"	3
	94513	Brentwood	2
	94521	Concord	1
	94523	Pleasant Hill	2
	94533	Fairfield	1
	94536	Fremont	2
	94538	"	1
	94544	Hayward	3
	94546	Castro Valley	3
	94547	Hercules	1
	94549	Lafayette	1
	94550	Livermore	1
	94553	Martinez	1
	94560	Newark	1
	94564	Pinole	1
	94565	Pittsburg	2
	94568	Dublin	2
	94571	Rio Vista	1
	94572	Rodeo	1
	94577	San Leandro	2
	94580	San Lorenzo	2
	94588	Pleasanton	2
	94590	Vallejo	1

Bay Area	94601	Oakland	1
	94602	"	1
	94605	"	2
	94607	"	1
	94610	"	1
	94611	"	2
	94618	"	1
	94621	"	1
	94649	"	1
	94660	"	1
	94702	Berkeley	2
	94705	"	2
	94706	Albany	1
	94707	Berkeley	1
	94708	"	1
	94904	Greenbrae	1
	94930	Fairfax	1
	94952	Petaluma	2
	94954	"	1
	95008	Campbell	1
	95020	Gilroy	2
	95032	Los Gatos	1
	95035	Milpitas	2
	95050	Santa Clara	1
	95051	"	1
	95111	San Jose	1
	95112	"	1
	95116	"	1
	95118	"	1
	95123	"	3
	95124	"	1
	95125	"	1
	95126	"	1
	95127	"	3
	95129	"	2
	95148	"	1
	95403	Santa Rosa	1
	95409	"	1
	95425	Cloverdale	1
	95442	Glen Ellen	1
	95492	Windsor	1
	95687	Vacaville	1
	95688	"	2
	95812	[Invalid for this region]	1
Central Coast	91320	Newbury Park	2
	91360	Thousand Oaks	2
	91362	Thousand Oaks	3
	93001	Ventura	1
	93003	"	2

Central Coast	93010	Camarillo	1
	93015	Fillmore	1
	93030	Oxnard	1
	93033	"	1
	93035	"	1
	93060	Santa Paula	2
	93065	Simi Valley	2
	93101	Santa Barbara	1
	93103	"	2
	93105	"	1
	93401	San Luis Obispo	2
	93420	Arroyo Grande	1
	93422	Atascadero	1
	93442	Morro Bay	1
	93455	Santa Maria	1
	93461	Shandon	1
	93901	Salinas	1
	93905	"	1
	93906	"	1
	93907	"	3
	93960	Soledad	1
	95033	Los Gatos	1
	95064	Santa Cruz	1
	95073	Soquel	1
	95076	Watsonville	2
Central Valley	92209	Invalid zip code	1
	92306	"	1
	92365	[Invalid for this region]	1
	92704	[Invalid for this region]	1
	93205	Bodfish	1
	93212	Corcoran	1
	93215	Delano	1
	93225	Frazier Park	1
	93230	Hanford	1
	93247	Lindsay	1
	93257	Porterville	1
	93304	Bakersfield	3
	93305	"	1
	93306	"	2
	93309	"	3
	93611	Clovis	2
	93612	"	1
	93620	Dos Palos	1
	93625	Fowler	1
	93630	Kerman	1
	93631	Kingsburg	1
	93635	Los Banos	2
	93637	Madera	1
	93638	"	1

Central Valley	93643	North Fork	1
	93701	Fresno	1
	93702	"	1
	93704	"	2
	93710	"	1
	93711	"	1
	93726	"	1
	93727	"	1
	95023	Hollister	1
	95204	Stockton	1
	95205	"	1
	95207	"	2
	95209	"	1
	95210	"	1
	95213	"	1
	95242	Lodi	1
	95301	Atwater	1
	95307	Ceres	1
	95340	Merced	3
	95348	"	1
	95358	Modesto	1
	95368	Salida	1
	95616	Davis	3
	95621	Citrus Heights	3
	95624	Elk Grove	1
	95627	Esparto	1
	95630	Folsom	1
	95670	Rancho Cordova	3
	95673	Rio Linda	1
	95691	West Sacramento	1
	95695	Woodland	1
	95815	Sacramento	1
	95818	"	1
	95819	"	2
	95820	"	1
	95821	"	2
	95824	"	1
	95831	"	1
	95832	"	1
	95835	"	1
	95901	Marysville	2
	95906	Invalid zip code	1
	95926	Chico	3
	95928	"	3
	95936	[Invalid for this region]	1
	95948	Gridley	1
	95963	Orland	1
	95966	Oroville	1
	95968	Palermo	1

Central Valley	95969	Paradise	2
	95982	Sutter	1
	95991	Yuba City	1
	96003	Redding	5
	96080	Red Bluff	2
Inland Empire	91709	Chino Hills	2
	91710	Chino	2
	91711	[Invalid for this region]	1
	91739	Rancho Cucamonga	1
	91752	Mira Loma	1
	91762	Ontario	1
	91764	"	2
	91784	Upland	1
	91786	"	1
	92201	Indio	3
	92223	Beaumont	1
	92243	El Centro	1
	92260	Palm Desert	1
	92263	Palm Springs	1
	92270	Rancho Mirage	1
	92311	Barstow	1
	92314	Big Bear City	1
	92324	Colton	2
	92335	Fontana	1
	92342	Helendale	1
	92345	Hesperia	1
	92346	Highland	1
	92354	Loma Linda	1
	92358	Lytle Creek	1
	92363	Needles	1
	92373	Redlands	3
	92377	Rialto	1
	92392	Victorville	1
	92399	Yuciapa	1
	92404	San Bernardino	1
	92501	Riverside	2
	92503	"	1
	92504	"	2
	92505	"	1
	92506	"	2
	92508	Riverside	1
	92509	"	2
	92545	Hemet	2
	92555	Moreno Valley	2
	92557	"	3
	92562	Murrieta	2
	92567	Nuevo	1
	92570	Perris	1
	92582	San Jacinto	1

Inland Empire	92592	Temecula	2
	92595	Wildomar	1
	92860	Norco	1
	92880	Corona	1
	92882	"	1
	92883	"	1
	93391	Invalid zip code	1
Los Angeles	90002	Los Angeles	1
	90006	"	2
	90008	"	2
	90011	"	4
	90016	"	1
	90018	"	1
	90023	"	1
	90025	"	2
	90026	"	2
	90031	"	1
	90032	"	1
	90034	"	1
	90037	"	3
	90046	"	2
	90059	"	1
	90060	"	1
	90061	"	1
	90063	"	2
	90065	"	1
	90066	"	2
	90069	West Hollywood	1
	90201	Bell	1
	90207	Invalid zip code	1
	90220	Compton	1
	90221	"	1
	90232	Culver City	1
	90240	Downey	2
	90241	"	1
	90247	Gardena	4
	90250	Hawthorne	2
	90254	Hermosa Beach	1
	90255	Huntington Park	1
	90260	Lawndale	1
	90275	Rancho Palos Verdes	1
	90277	Redondo Beach	1
	90280	South Gate	1
	90291	Venice	2
	90301	Inglewood	1
	90302	"	1
	90444	Invalid zip code	1
	90603	Whittier	1
	90604	"	1

Los Angeles	90638	La Mirada	2
	90640	Montebello	1
	90650	Norwalk	4
	90660	Pico Rivera	1
	90670	Santa Fe Springs	1
	90706	Bellflower	1
	90715	Lakewood	2
	90717	Lomita	1
	90723	Paramount	1
	90740	[Invalid for this region]	1
	90745	Carson	2
	90746	"	1
	90802	Long Beach	1
	90803	"	1
	90805	"	1
	90806	"	1
	90807	"	1
	90808	"	3
	90814	"	1
	91001	Altadena	1
	91024	Sierra Madre	1
	91030	South Pasadena	3
	91042	Tujunga	1
	91046	Verdugo City	1
	91106	Pasadena	1
	91108	San Marino	1
	91201	Glendale	1
	91205	"	2
	91206	"	2
	91214	La Crescenta	1
	91302	Calabasas	2
	91316	Encino	3
	91326	Northridge	1
	91342	Sylmar	1
	91343	North Hills	2
	91344	Granada Hills	3
	91352	Sun Valley	1
	91355	Valencia	1
	91356	Tarzana	1
	91403	Sherman Oaks	2
	91406	Van Nuys	2
	91601	North Hollywood	4
	91602	"	3
	91606	"	1
	91702	Azusa	1
	91722	Covina	1
	91732	El Monte	2
	91776	San Gabriel	1
	91790	West Covina	1

Los Angeles	91791	West Covina	1
	93534	Lancaster	1
North Coast/Sierra	95252	Valley Springs	1
	95255	West Point	1
	95357	[Invalid for this region]	1
	95415	Boonville	1
	95437	Fort Bragg	1
	95482	Ukiah	1
	95503	Eureka	1
	95521	Arcata	1
	95540	Fortuna	1
	95602	Auburn	1
	95642	Jackson	1
	95650	Loomis	1
	95678	Roseville	1
	95703	Applegate	1
	95709	Camino	1
	95726	Pollock Pines	1
	95746	Granite Bay	2
	95945	Grass Valley	1
	95949	"	3
	96101	Alturas	1
	96130	Susanville	1
	96146	Olympic Valley	1
	96151	South Lake Tahoe	1
Orange County	90630	Cypress	2
	90631	La Habra	1
	90638	[Invalid for this region]	1
	90680	Stanton	1
	90720	Los Alamitos	1
	90740	Seal Beach	2
	92222	[Invalid for this region]	1
	92618	Irvine	1
	92627	Costa Mesa	2
	92646	Huntington Beach	3
	92647	"	1
	92651	Laguna Beach	1
	92656	Aliso Viejo	1
	92660	Newport Beach	1
	92672	San Clemente	2
	92677	Laguna Niguel	1
	92691	Mission Viejo	2
	92692	"	1
	92703	Santa Ana	1
	92704	"	2
	92705	"	1
	92777	Invalid zip code	1
	92804	Anaheim	1

Orange County	92807	Anaheim	2
	92821	Brea	2
	92823	"	1
	92833	Fullerton	1
	92840	Garden Grove	1
	92843	"	1
	92845	"	1
	92887	Yorba Linda	1
San Diego County	91932	Imperial Beach	1
	91935	Jamul	1
	91942	La Mesa	1
	91945	Lemon Grove	1
	91950	National City	1
	92007	Cardiff by the Sea	1
	92008	Carlsbad	3
	92020	El Cajon	1
	92021	"	1
	92024	Encinitas	1
	92027	Escondido	1
	92040	Lakeside	1
	92054	Oceanside	2
	92056	"	3
	92064	Poway	1
	92065	Ramona	3
	92069	San Marcos	2
	92071	Santee	1
	92075	Solana Beach	1
	92082	Valley Center	1
	92083	Vista	2
	92084	"	1
	92103	San Diego	1
	92104	"	2
	92105	"	3
	92106	San Diego	1
	92107	"	2
	92109	"	3
	92110	"	1
	92111	"	2
	92114	"	2
	92115	"	4
	92118	Coronado	1
	92122	San Diego	1
	92123	"	1
	92139	"	1
	92154	"	2

Appendix B: Open Ended Comments

Question: Is there anything you would like to tell us about this survey or your experiences on wildlands and wilderness areas?

I don't think I'm qualified to answer these questions.

I think they're great; I hope we always have them.

Support controlled burns: better than out-of-hand.

I own property in Malibu; seems like the Forest Service does not know what the Coastal Commission is doing as far as planting trees; I think the two agencies should work together.

Reword some of the questions.

Some questions need to be revised: not very clear.

I wish they had more off-road parks.

Questions need to be more precise.

I would like to know the results of this study, maybe you could post it on the internet; I would like to broaden my knowledge on these issues and would like any brochures that might be available to the public.

A lot of fires in Idaho due to lightning; it's really good firefighters keep sharp on fighting fires.

Survey is well-intended but a bit ambiguous; questions beg the issue; assumes public is knowledgeable about Forest Service; public does not know how much control other agencies have over the Forest Service.

I'm glad we've got forests.

Leave them alone, keep them open: no more closure of lands.

Good in one way, access to places I liked to go to shut down, some valid and others invalid.

Let stuff burn.

Survey was fine.

I have been a journalist for many years and I have interviewed many people about this subject so I am quite knowledgeable.

I think it was an interesting survey and they should do more of them.

I just love the wildlands and wilderness areas; I think they should stick around.

I enjoy wildland areas; they need to be conserved for our youngsters.

I wish they would make areas more protected across the United States: they are tearing down a lot of our nation's mountain ranges.

Like to go camping; Crater Lake has burn scars but it is getting green again; Mom worked in timber management and Dad was in fire suppression.

No experience in wildland and wilderness areas; information is from articles read and newscasts.

The Forestry Service does not make it accessible enough to get the wood for burning; I would like to see the forestry cut wood, leave it in piles and allow people to get them to burn, it would be much quicker; do not shut the forest down.

Glad Forest Service does controlled burns; concerned about the population of really big trees.

I wish I was more informed about this issue.

Some questions should be more defined: worded better.

Survey is good.

I think this is great.

Wish I knew more about it.

Would like to have more information about wildlands because I don't know enough about the parks and places to visit.

Survey is too long.

Some of my viewpoints on burns are swayed by TV.

I don't get to visit it enough, it's getting too overpopulated.

Survey is confusing.

I'm opposed to the U.S. Forest Service's policy of allowing fires to burn uncontrolled; I support the California Department of Forestry and Fire Protection policy on wildland fires.

Survey would go faster if you only read 1-8 scale once.

It could be expanded to provide a couple of more options for answering.

Heartbroken to see them burning down all over the place instead of before when government let them have proper tree farming and underbrush; rather see properly forested than burning.

There is a need to preserve them.

Leave them alone.

Corporate logging should be strictly controlled by the U.S. Forest Service.

Building too much, not enough wildlife anymore.

I think they should be left alone; let the animals have their space.

We are in the hands of idiots; nobody really cares (the Forest Service).

Hopefully I was helpful.

E-mail the questionnaire.

Stop building homes in wildland and wilderness areas.

I think the survey is very worthwhile; I hope that it is helpful in preventing fires.

Good survey; I don't have much experience with wildlands, but all of us must give our support.

Controlled burns should have been done before now so the fires wouldn't have started in the first place; I'm glad to see that the Forest Service decided to take care of the problem.

People should recognize that is necessary to take care of the forest.

Survey gave me limited knowledge.

Enjoy taking hikes and walks around wilderness areas and parks.

I appreciate them and U.S. Forest Service does a fantastic job with national parks; we've visited almost all of them.

Forest fires are the way nature cleans itself.

There are a lot of smokers and people like that who are going to disregard any signs you put up; also I lived in an area where there were a lot of fires and it is very unnerving.

I think they are doing a good job; dogs are restricted from too many areas; I wish they would open Point South which is a beautiful beach; I think it is great that you guys are doing the study.

It's important to preserve what we have.

Wildlands should be preserved and we should do all we can to keep the timber industry out of them.

Boring survey; I wasn't interested in the topic.

We should protect the wildlands and wilderness more.

We should be able to give an explanation when asked a yes or no question because some of the questions are ambiguous.

The survey is somewhat informative, remembering what I know of the Forest Service; as far as I know the Forest Service is doing a fine job.

There is a good care of wildlands and people in charge of the forest always give help and instructions to visitors like what to do with the fire rings after camping.

Ecosystem is affected very much by smoke; animals go down the hills to eat when there has been a fire; we suffer from smoke after a fire, it's a continuing process.

Appreciate survey; glad to take the time.

It's good to get other people's opinions.

I'd like them to stay open as long as off-roaders behave themselves, but when they tear up the wilderness they of course need to be controlled; fewer rules seems to promote more freedom to enjoy wildlands, but people need to respect.

The U.S. Forest Service should take good care of the forests and animals in extinction.

Survey is erroneous and doesn't mean anything; general public is not privy to the forest service's goals; when going fishing expect clean campground.

It's a very interesting and tough survey.

Pleased to participate in the survey; it's good that someone is taking care of all the wildland and wilderness areas.

Forest areas and the management of fires is well taken care of by the Forest Service team.

I don't have a lot of knowledge.

The questions are interesting and good so that people know that something is actually being done in order to preserve our nature.

People who haven't lived around fires do not appreciate firefighters enough; people living in cities don't appreciate forests enough, and should leave alcohol home (don't make campfires while drinking!).

It's an interesting survey, but it's frustrating because the questions presuppose knowledge.

The chipping procedures are done by people so poorly trained that they are trying to work out community service time; this won't work having dumb convicts to help to improve the forest.

I'd like to learn more about wildlands from printed material by mail or a website that educates about wildlife because in society we only have knowledge about wildlife from Smokey the Bear.

Because they don't put out porta-potties, people tend to defecate not only in the creeks but in areas near the creeks, putting other people at risk; I don't eat fresh water fish any more because of that.

Need to be more educated.

Hope that wildspace is protected; understand it has to be eliminated; should be our top priority; highly opposed to drilling in National Forests; Clinton was on the right track.

Haven't had much experience on that but really liked the forests when I had the chance to visit them and study about them in high school.

I used to backpack a lot in other states such as Washington and used to be a firefighter here in Atascadero up until last year, so I'm very aware of danger.

We need to protect wildland areas at all cost so we can have our future generations enjoy them too.

Not always cognizant of what designation of the wilderness area is state, national, city, etc.

It is something that I think we should preserve for people who like to camp and fish.

Used to be a wildland firefighter for California Department of Forestry.

Used to live in mountains; need common sense; nice experience; beautiful country when comes to Forest Service; good experience for our children.

Montana controlled burn upset me and concerned me; needs to be more highly monitored.

It's an interesting survey and I've enjoyed it, but I am not a camper; sightseeing and occasional picnics are my only enjoyment of the wilderness, so it's really hard to see the encroachment of development and seeing it go up in smoke.

Question validity on study of this nature based on questions.

It's sad that the few abuse the wildlands and make it difficult for those that don't abuse.

This survey should be slightly shorter.

The questions were so vague that one person could say yes and another no; forests are important to the human; wildlands in Alaska should be protected against destruction lauded by government for commercial gain.

Round up all these guys committing crimes and not working and train them to make fire breaks or other work to prevent fires.

We strongly support fire prevention; we experienced a fire close to our home.

Informative.

More areas for extinct-bound animals; nothing too controlled.

There's a lot of them around me; we have a state park about a few miles away from here.

Interviewer should have a clearer voice.

Keep it well managed.

I like the questions because they are very informative.

Good idea to see what people have to say about these type of questions.

Should give information so people could make more educated responses.

I really appreciate it and I feel grateful that we live in an area where people care about it and are doing things to protect it.

Very enjoyable wilderness areas.

Want forest rangers to patrol forest more.

I liked how a deer or a tarantula was taken care of when I was on base; other states should try to do the same thing.

Love wildlife and natural life.

I would like for the U.S. Forest Service to use more helicopters that contain water to extinguish mountain fires.

Please do this survey before 8 p.m.

Smokers are still irresponsible; I recently saw two people discard their cigarettes out of the window of their car while driving through a forest area.

These surveys are really important to improve people's lives.

Survey good.

It's a good survey.

Forestry should do a better job protecting the land; people are too inconsiderate and the forestry should do something about it.

Forest Service needs to do more public education and outreach; not a native Californian, but have seen things that make me think if I was a native, I should know better, such as people throwing cigarette butts out the window.

I live in Sacramento, I love nature and I do everything I can to bring nature to my back yard; they should ban vehicles in Yosemite.

Some of my answers depend on my very narrow exposure to the circumstances.

Condense interviews.

I think it is important to conserve our wildlands; it is good to have them to escape to.

I do not visit forest areas as often as others, however, when I do, I think about how important it is to keep our earth clean and also how important it is to control fire when it occurs by natural causes or by people; I like this survey.

Everything you mentioned except for fires are a natural part of life.

Until now it is good that you are doing surveys to better the environment and to help control fires.

In California we have to buy a National Forest Pass now, for parking; I believe \$30 is a large amount, but it is not explained to account for where the money is going; how about an explanatory brochure.

Federal land management sucks, shut majority of desert down.

Used to camp a lot.

It is good that you are doing the survey, even though I don't know all that much about wildlands or wilderness areas.

My husband is a fireman so I think I have lots of information on that; probably if I was not so in touch with involved people I would not know much about it, or wouldn't care as much.

Get rid of the Venture Pass; permits to be in wildland forests.

Mechanical things out of areas, if combustible.

If they have a pamphlet describing the techniques that might increase the knowledge of people; more information for the public.

Nothing is done in order to prevent fires, and when there's a fire here everything burns up too fast because houses and buildings are wood-based; in my country they make excavations or fire breaks to help prevent fires.

I worry more about wetlands because the wildlife uses these areas and the more we build the less area wildlife has to survive; fires also occur in wetlands and that concerns me too.

Survey assumes previous knowledge and creates inaccuracies; more specific backgrounds on questions.

Not interesting topic but still important; need nature; too much pollution especially in air; stop throwing cigarettes on ground, can cause fire; teach more about nature.

There are absolutely very beautiful wildland areas around California and people should visit those places.

Hope it's beneficial for research.

Think California is doing a great job with management of forest fires on our wildland.

Survey is great; here in California, campsites, trailheads, signs are appropriate to maintain forests.

Tone down language in survey because somebody with a lesser education wouldn't understand it.

Q13: think Forest Service has to take "weather" into consideration in conducting controlled burns; Q20(4): fire is natural except for man-made ones; Forest Service needs to get on the fire more quickly.

Like doing activities on our wildlands and national forests so do not agree with the process of closing some parts of the forests to the public; violators of any forest should be punished.

Opposed to nature walkers having to be walked through the woods.

Love to go up and enjoy the mountains, my favorite activity and wouldn't want anyone treading on rights to enter that area, or drive through it; volunteers in a cleanup effort out there also.

I hope I answered everything right and answered correctly.

Currently a little unhappy with Forestry not receiving more money from the government and not being able to keep forest roads open (fire lanes) because of lack of funding; would like government to go back to giving them the funding needed.

I wish I was more experienced in it; we do all kinds of things outside; I don't do Yosemite which I will do when my kids are older; we live in a controlled area; I do watch TV about fires.

Support burning of areas of need; fire brush problems.

They've been good all my life.

It's good to spend time on trying to improve the conditions of wildland and wilderness areas.

The rating questions are tricky; ask the true and false questions first.

People mess it up, that's what it amounts to; there'll be fire and so forth it's sad but that's how we are; I'd like to think someone is doing something good and cleaning it up.

There is obviously a lot of information about managing fires but the general public is not aware of them: they should be addressed better; we should manage the fires by thinning our forests.

Forest Service is inept in controlled burns and there is no recourse for the people whose lives they damage; I feel like they should not be allowed to manage the forest.

I believe that roads to wildlands cause long-term harm; our forests are not in good hands with the Forestry Department in certain portions of our country such as Alaska which are being exploited by loggers.

There is too much trash, and too many lazy employees in forest services with unpleasant attitudes; they are not very cordial to visitors.

I am very anti-Sierra Club and fellow travelers.

We should go back to the practices of the Native Americans regarding controlled burns: it was more effective.

Apologize for not knowing more about this kind of information.

Interesting survey; not specific enough and clear; skipped ones due to unclarity.

It's a good thing to let people spend time in wilderness areas, it's good for them; all the oxygen is good.

Cottage Grove Oregon takes care of their fires by taking care of brush, by thinning dry trees and cutting them down, and here in California we use the forests so much for campfires out in the woods, that we end up creating fires.

Remember our children.

Don't know enough.

Too many questions; questions are too hard to understand.

Forest Service management needs to be more open-minded and have more field training.

People don't take care of fire properly.

People need to let nature take its course; reducing risk by reducing vegetation can be more harmful than good.

Did a similar one not too long ago; I own a ranch; I am an environmentalist myself.

I'm worried about tall, dry grass because people set it on fire.

People have the chance to enjoy the environment, and when there's a fire which destroys everything it's a terrible thing; nature is a wonderful thing.

I think you're doing a good job with this survey.

We covered it well.

Just that I just found out I don't know very much and the survey makes me want to find out the answers to these very interesting questions you have posed.

Fires are very dangerous and the houses in California don't have the structure to survive a fire; all measures should be taken to stop and prevent fires.

I appreciate people doing this kind of study to preserve the greenery of nature, especially the hard work of the Forest Service keeping parks healthy for public to see.

If they explain more clearly the questions they would get better answers from me; they should allow you to explain it to us.

This survey has made me more aware of the importance of taking care of our wildland and wilderness areas.

Must protect the land from fires to protect the natural resources because they are the most important thing for supporting the population.

Need to be more specific.

My only concern is that the U.S. Forestry Service be working for California and not big business interests, and I am waiting to see how this manifests in the future; I think this is the source of my recent swing to mistrust.

Some of the questions need to be more specific; trash in wildlife places was not even brought up.

We need to understand how to take care of the wilderness areas and take a little better care of them.

I am an agronomist; for proper management of forest, it's necessary to clear underbrush and maintain health of forest by methods mentioned earlier; these are what I'd like to see done to maintain the health of forests and prevent fires.

Keep up the good work.

I think everyone needs to take care of the forest so our future generations can have the opportunity to visit these beautiful areas.

I appreciate that they preserve wildlife and wildlands.

Wilderness areas should not be developed so that services should charge money for people to look at it; that takes away where nature should be; public is overusing and destroying the forests; there's a limit to what the forest could take.

I feel they are being too restricted to the general public; it's our land and we should have access to it; overall, we try to manipulate mother nature quite a bit; more should be available; too much emphasis on keeping people out.

History has shown that controlled burns can get out of control: a good thing if done right.

Important to protect wildland and wilderness areas.

I've spent a lot of time in the mountains and I've noticed that people are not too destructive; I don't believe they should seal off the land to all the people; I think the Forest Service people are idiots.

The fire department and the Forest Service do a wonderful job out here; we had a forest fire about a month ago and they brought it under control in half an hour; they were there five minutes after it started.

Haven't used the facilities that much.

Forest Service is inept and inefficient, not enough funding or manpower to enforce rules; alternative methods should be used in addition to controlled burns; people only care about fires when it affects them personally; educate people.

Believe U.S. Forest Service allows too much logging.

Not fond of multiple choice questions: sometimes misleading.

Fire Department does a fantastic job and I applaud them for their effort; without them my house would be gone.

Prescribed fires are a valuable tool; should be carefully done.

Forests should be open for free without fees; fees should be eliminated; more trash cans.

Tahoe National Forest: needs cleaning out because of dead wood on trails.

I hope it helps so people can continue to enjoy it in a safe manner.

Generally impressed with Forest Services and areas; I think the question about motor vehicles is not fair because motor vehicles should not be used but bikes and such should.

I enjoy the wilderness and visit quite often.

Keep the parks open to responsible parties; open for everyone to enjoy.

Very concerned about the management of the forests: too much politics involved in decisions and the Forest Service doesn't do a good job.

Controlled burns: excellent method for bringing back natural wildlife and deterring from fires at inopportune times.

I'm against the closing of national forests; the people in favor of closing the forests are closed-minded to other solutions, like education.

Really opposed to what lumber companies are doing and getting away with, present great threat to California heritage.

Some of those questions were very confusing because they were so similar.

I don't like it when the off-road vehicles tear up the mountain side; they leave scars on the terrain.

Survey is frustrating because of exceptions; human beings do not have any more rights to property than animals; fires are a natural part of process and need to burn out except when life is at stake; nature needs to choose when there are fire.

I'd like to see it improve, a little more focus on it.

Fire management needed; too much littering.

I really appreciate camping areas; also the low cost of camping.

I have deer hunted after forest fires and if anyone has seen the damage that was done, they would support stopping the fires as soon as they could.

At the beginning I thought there was excessive care in the forest but now I understand that it's necessary.

A lot of people build where they shouldn't build and it's just tough that fire gets their building; if fire takes place naturally from lightning area needs to be cleaned of brush but starting them on purpose isn't the best solution.

Seems like the U.S. Forest Service is doing a good job of managing fires.

Glamis area: they're trying to save some cactus in this area by making the area completely off-limits to off-road vehicles; I think they should meet us halfway because some areas they want to make off-limits don't even have that cactus.

Basically this survey calls for conjecture and the questions are not clearly defined; education is the best method to teach the public to prevent forest fires: I was an Eagle Scout, also scoutmaster for 11 years.

Forest Service considers "Safety First" its motto when fighting fires; after five years as a firefighter for the Forest Service on the front lines, I am impressed with the job they are doing.

Interesting survey however I was not interested in wildlands; I appreciate that we are doing it and it was a great experience for me.

I used to visit all of the parks to enjoy fishing.

I think that parking passes suck.

Respect the outdoors; leave it alone for the animals; people go and have no respect for the wildlife and their environment; areas should be fenced off and people should not be allowed to go in and disrupt the area.

There should be enough budget for educating the public about forest fire prevention, even on TV programs; if Department of Forestry would have such a program, including brochures about fire safety, everyone could enjoy the peace and beauty.

We should do everything we can to preserve wildland; being lost and too developed; support controlled burns.